



5.1 Reference Speaker System • Installation Instructions

Our speakers are the result of over five decades of designing and manufacturing what many consider the finest sound reproduction products available. We hold several key patents in loudspeaker technology, including the soft-dome tweeter. Our mission, our passion is to constantly advance the art and science of accurate audio reproduction. Our dedication insures your new CineMicro System will accurately reproduce all the impact, detail and delicacy of today's digital technologies.

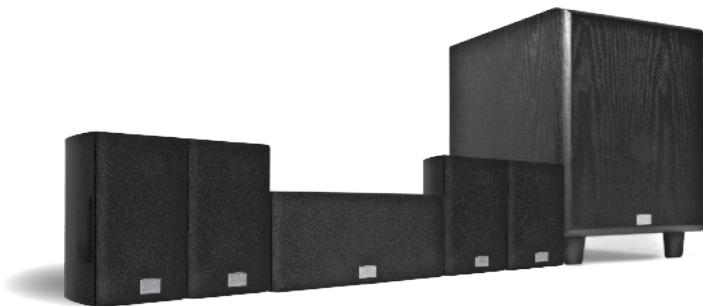
We recommend that you take the time to read this manual thoroughly before connecting speakers to your amplifier or receiver. In the highly unlikely event that you should experience a problem with set-up or operation, please contact one of our carefully chosen dealers for assistance, or contact us directly.

We trust that your CineMicro^{One} home theater speaker system will enrich your enjoyment of music and movies beyond your expectations.

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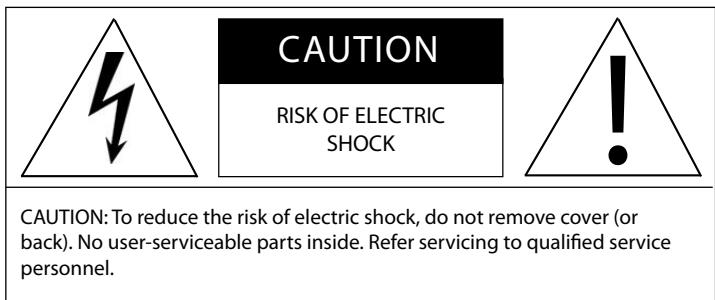
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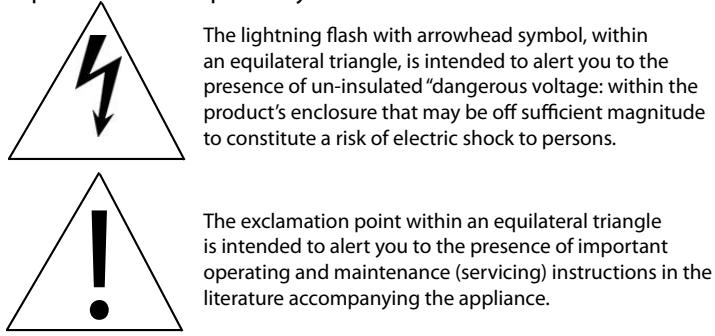
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SAFETY INSTRUCTIONS



Explanation of Graphical Symbols



1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and other instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

PORTABLE CART WARNING



7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat - The appliance should be situated away

from heat sources such as radiators, stoves, or other appliances that produce heat.

10. Power Source - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed up or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
13. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. Object and Liquid Entry - Care should be taken so that neither objects fall nor liquids spill into the inside of the appliance.
15. Damage Requiring Service - The application should be serviced by qualified service personnel when:
 - a. the power supply cord or the plug has been damaged,
 - b. objects have fallen onto or liquid has been spilled into the appliance,
 - c. the appliance has been exposed to rain,
 - d. the appliance does not appear to operate normally or exhibits a marked change in performance, or
 - e. the appliance has been dropped or the cabinet damaged.
16. Servicing - The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. Grounding or Polarization - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.

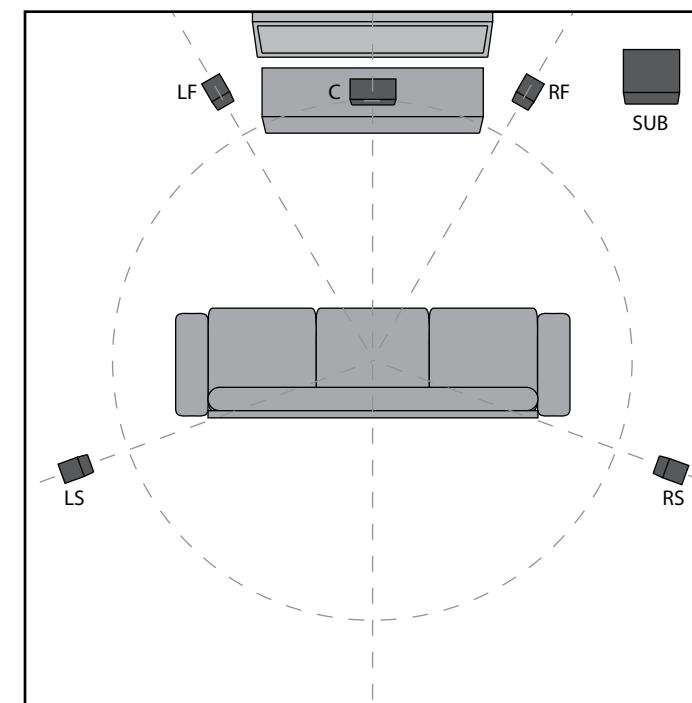
ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRESE ET POUSSER JUSQU AU FOND.

HOME THEATER SPEAKER PLACEMENT

Today's digital multi-channel home theater technology has elevated the art of "surround sound" to reproduce the movie theater experience in your own home. Speaker requirements and placement are important when reproducing these multi-media effects.

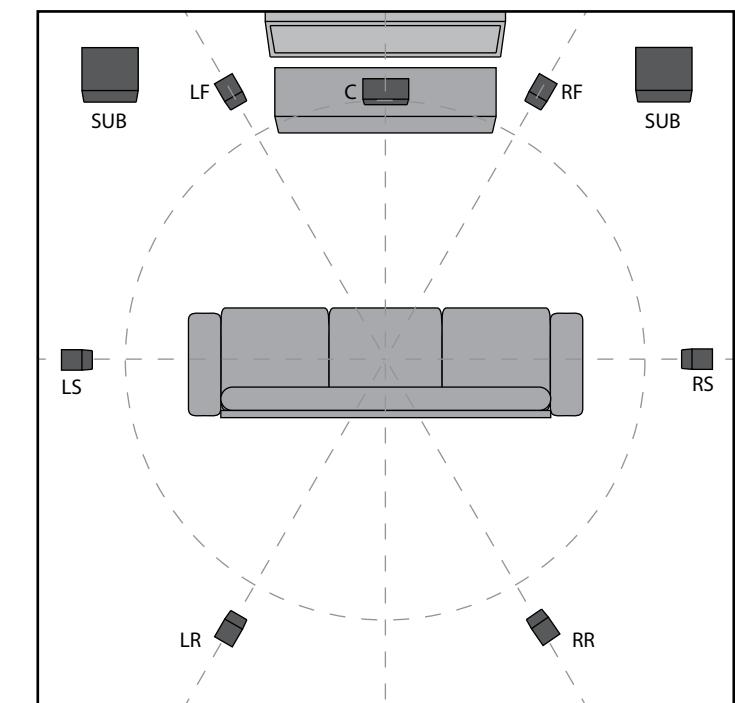
Two front speakers (left and right), two surround speakers (left and right), a center-channel speaker, and a subwoofer define the minimum arrangement for multi-channel systems such as Dolby® Pro Logic, DTS™, and Dolby Digital. The CineMicro^{One} was designed as a matched system to give you the most realistic seamless experience possible.

Placement of speakers in your room will impact the final listening experience. To position your speakers, there are some general guidelines that take room size, shape, and fixtures and furnishings into account. Use the following illustrations as a general guide for speaker placement in a typical home theater system.



5.1 HOME THEATER SYSTEM

In a 5.1 home theater system, the center channel (C) should be placed at 0° directly below or above the video screen, the left front (LF) and right front (RF) speakers should be placed at 30° from the listening area, and the left and right surrounds (LS and RS) should be placed at 110°. All five speakers should be placed at or near ear level.



7.2 HOME THEATER SYSTEM

In a 7.2 home theater system, the center channel (C) should be placed at 0° directly below or above the video screen, the left front (LF) and right front (RF) speakers should be placed at 30° from the listening area, and the left and right surrounds (LS and RS) should be placed at 90°. The left rear (LR) and right rear (RR) speakers (sold separately) should be placed at 150°. All seven speakers should be placed at or near ear level.

Front speakers should be placed 6-8 feet apart (or on the sides or your screen if your screen is wider) to fully separate the left and right channels. Whether placed on speaker stands or on shelves, your speakers should be at or slightly above ear level.

Rear surround speakers also should be placed at or slightly above your listening position for the best reproduction of surround-sound effects. Ideally, they should be facing into your favorite listening position from either side of the room.

Center speaker placement should be, if possible, directly on top of or under your TV monitor or projection TV screen. Center speakers should be placed in a horizontal orientation, directly below (or above) the center of your video screen. This correctly positions the critical sound track information (usually dialogue) that filmmakers direct to the center channel. Phase Technology center speakers are magnetically shielded so that they will not interfere with any TV's.

SUBWOOFER PLACEMENT

Subwoofer placement is less critical, because the frequencies they reproduce are omni directional. This means the human ear doesn't perceive these low frequencies as coming from a specific direction, enabling placement of a subwoofer virtually anywhere in the listening room.

It's best, however, to keep a subwoofer within the sound field of the other speakers. The closer the subwoofer is to a wall, the louder and more intense its bass output will be: this effect is even stronger when the sub is placed in or near a room's corner. If using two subwoofers, start by placing them next to the front left and right speakers, in both front corners or one in the corner and one 1/3 of the way along the front wall from the corner. Each room is different. Experiment with these options or try other locations until you get the best results. If you must choose a less-than-ideal position, the output level of Phase Technology powered subwoofers is adjustable to compensate for your listening environment.

SPEAKER CONNECTIONS

The following instructions apply whether you are using a separate amplifier or Home Theater receiver. For simplicity we will use the term "amplifier" throughout this manual to mean both. With system power off and your amplifier unplugged, please follow these steps:

Special Note: Observe Speaker Polarity Carefully!

Every cable, speaker and amplifier is clearly marked to show their positive (+) and negative (-) terminals. Amps and speakers may use some combination of these symbols and/or colors to indicate positive (usually red) and negative (usually black or white) connections. One strand of your cable will also be ridged and/or marked with a colored line or other indicator on the positive side. For proper polarity and, thus, ideal system performance, always connect the positive side of the cable to the positive terminals on your speakers and amplifier and the negative side of the cable to the negative terminals.

Front Speakers: The pair of front speaker connections (left and right) on your amplifier will be labeled "Front" or "Main." Connect the speaker cables for your left and right front speakers using these terminals and then connect the cables to the front satellites. Observe positive and negative polarities.

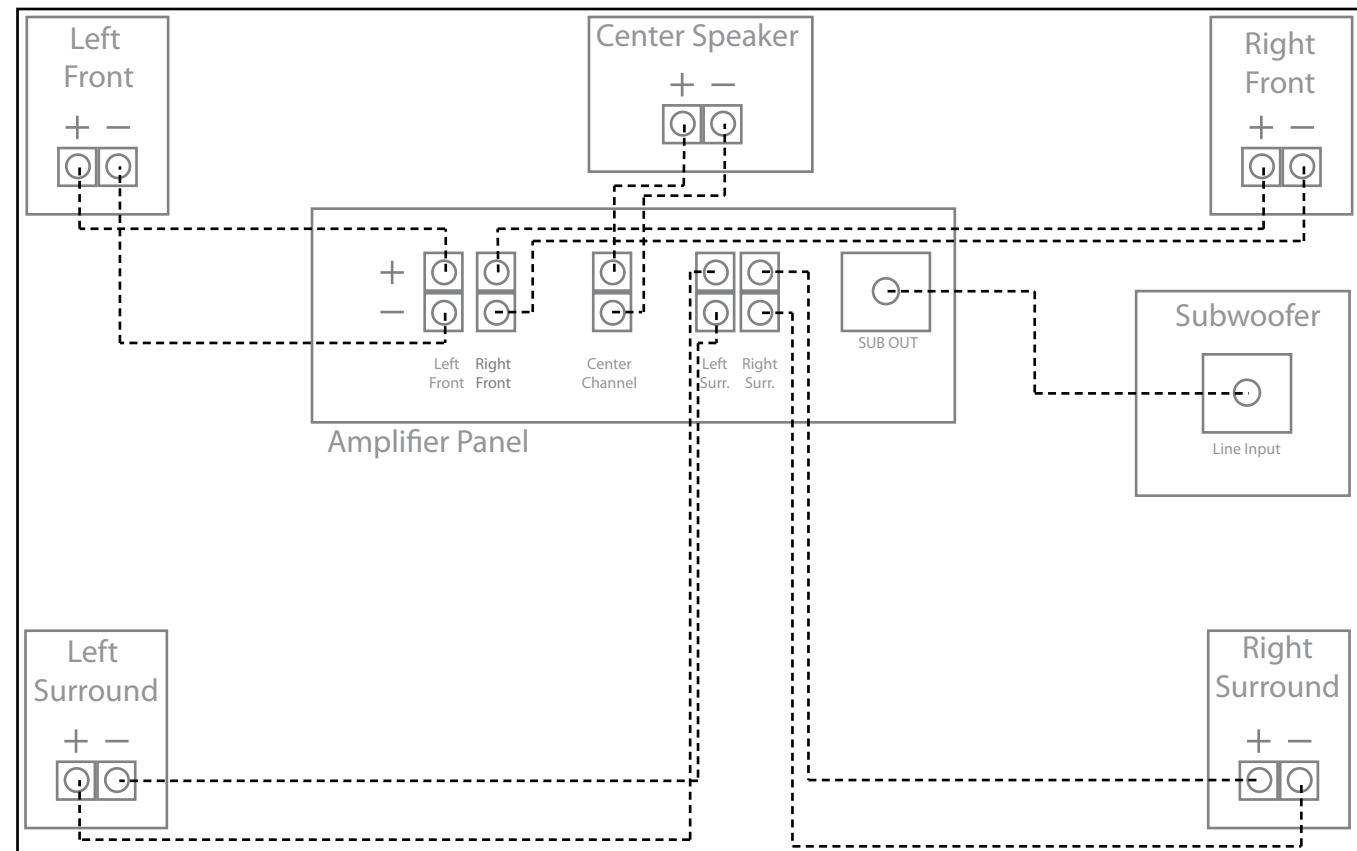
Center Speaker: The center speaker connections on your amplifier will be labeled "Center" or "Center Channel." Connect the speaker cables for your center channel speaker using these terminals and then connect the cables to the center speaker. Observe positive and negative polarities.

Surround Speakers: The pair of surround connections (left and right) on your amplifier will be labeled "Surround." Connect the speaker cables for your left and right surround speakers using these terminals and then connect the cables to surround satellite speakers. Observe positive and negative polarities.

Rear Speakers (optional purchase): The pair of rear connections (left and right) on your amplifier will be labeled "Rear." Connect the speaker cables for your left and right rear speakers using these terminals and then connect the cables to the rear satellite speakers. Observe positive and negative polarities.

6.1-7.2 and Additional Subwoofers: Individual CineMicro^{one} satellite speakers and subwoofers are offered separately. One or two extra satellites can expand your 5.1 system into a 6.1 or 7.1 system. Adding an extra subwoofer will expand your system to a 5.2, 6.2, or 7.2 system. Ask your Phase Technology dealer for details.

Please refer to the diagram on the following page for speaker connections.



MOUNTING THE CINEMICRO^{ONE} ON A WALL

The four satellites and center channel include keyhole-style inserts for on-wall mounting. Use an 8 mm screw in a drywall anchor capable of holding 2-3 times the weight of the speaker in the location you wish to mount the speaker. Leave the screw head about 1/4" out of the anchor, then slide the keyhole insert over the screw.

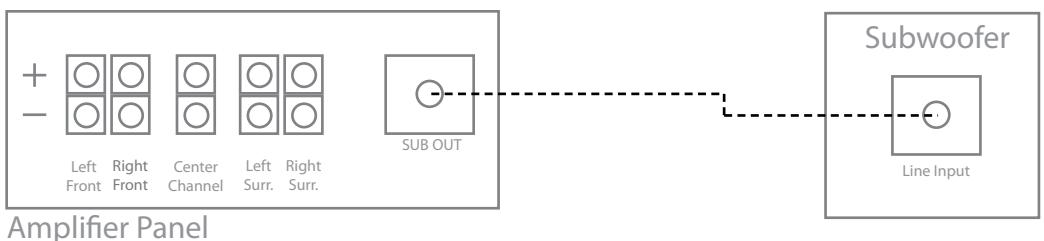
Additionally, the four satellite and one center channel speakers feature M5 (5 mm) threaded inserts mounted on the rear or bottom of the speakers for use with standard wall mounting brackets (available from third party vendors).

TABLE TOP OR SHELF PLACEMENT

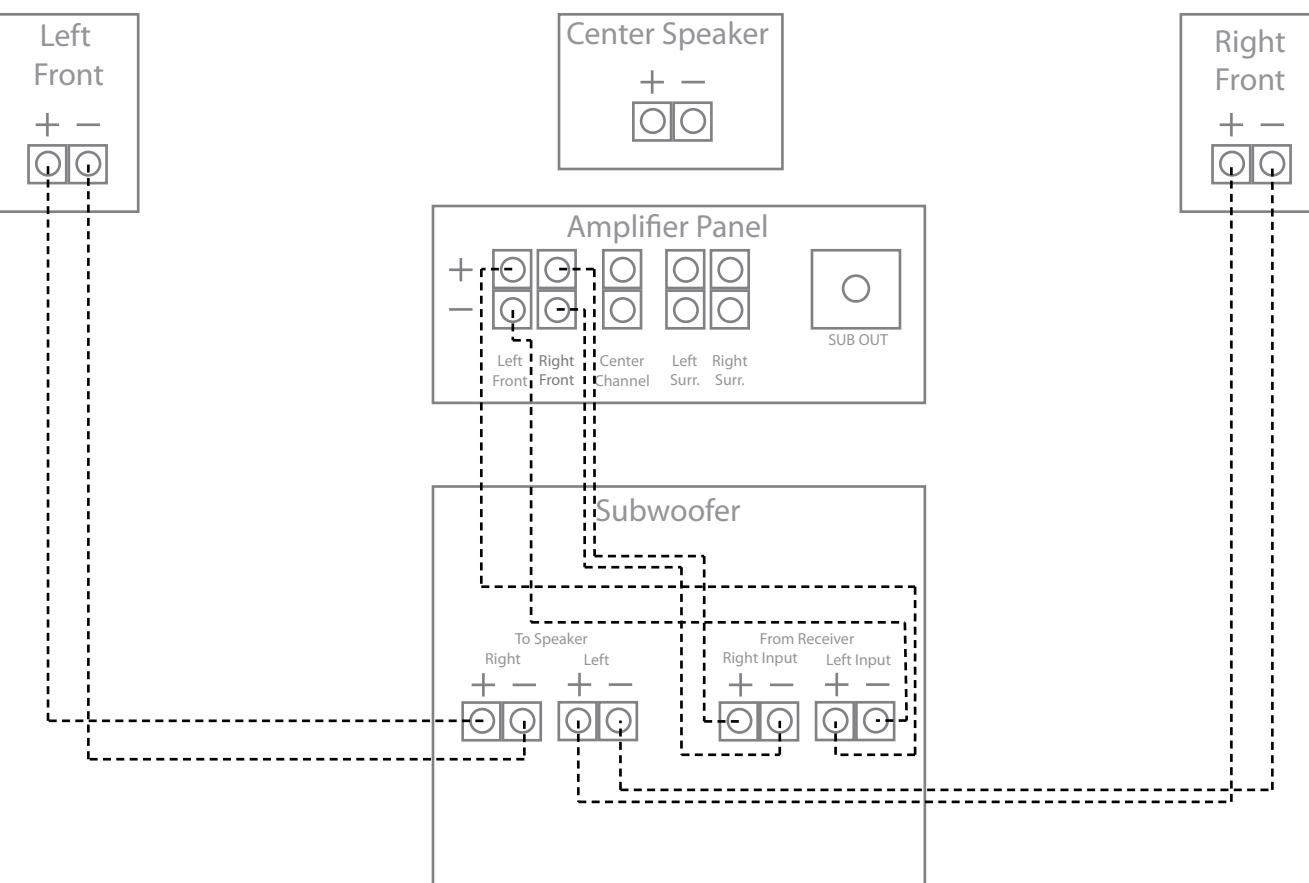
Included with your CineMicro speakers are self adhesive bumpers that can be used on the bottoms of the speakers to protect the finish when placing it on a shelf or table top. Simply peel off four of the bumpers from the backing paper and apply the four bumpers to the bottoms of each of the satellite speakers. To keep the center channel speaker from rocking and to level the speaker, two angled plastic feet are included that can be attached to the bottom of the speaker cabinet. Use two supplied screws to attach the feet to the left and right threaded inserts in the bottom of the cabinet. Two extra bumpers are also included to apply to the bottom of the speaker to protect the finish of the cabinet.

SUBWOOFER CONNECTIONS

Option 1: Low Level Setup This is the recommended method for those amplifiers and receivers that are equipped with a "Subwoofer Out" or "Pre-Amp Out" connection. Virtually all audio/video receivers have this connection clearly marked on the rear panel. Run a dedicated interconnect cable with RCA connectors from the subwoofer output jack to the line input on the subwoofer. In this setup, you will be using the internal crossover on your processor.



Option 2: High Level Input Setup If your amplifier or receiver does not have a dedicated subwoofer output, it will be necessary to connect your new subwoofer directly to the speaker output terminals on the back of the unit. In this scenario, you will be running high quality speaker wires from the left and right front outputs of your amplifier to the high level inputs on the subwoofer. You will then need a second set of wires to carry the signal from the subwoofer back to the main speakers.



AMPLIFIER SETUP AND BASS MANAGEMENT

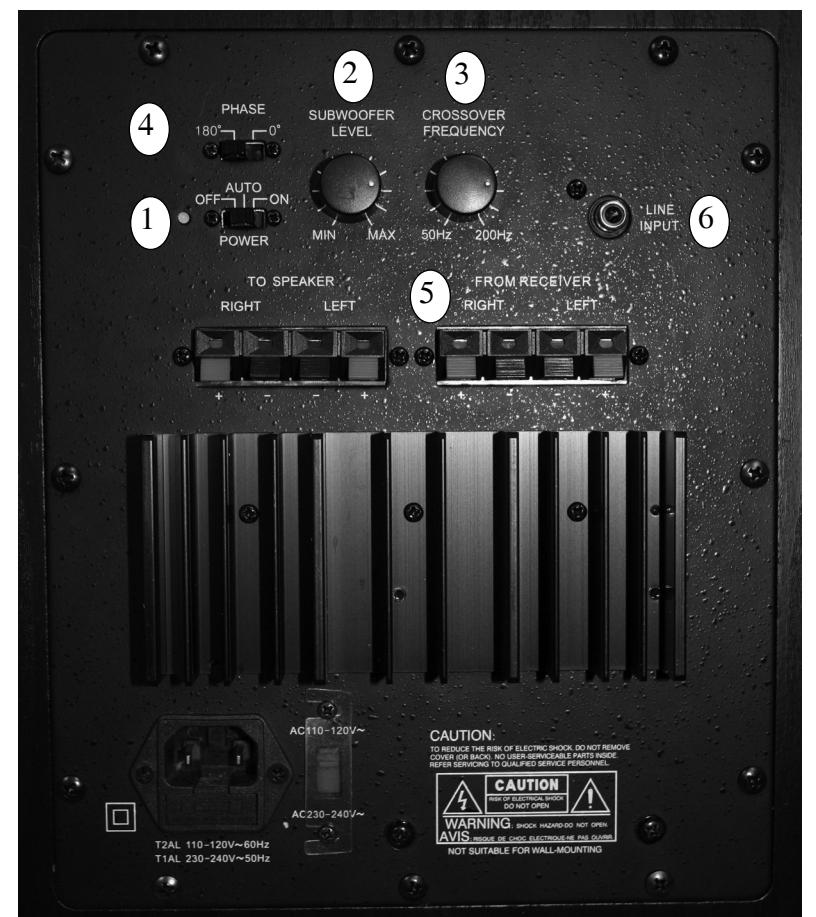
Many home theater receivers/processors have a feature that controls how the bass is processed and delivered to the subwoofer. It also adjusts the amount of bass that is sent to your satellite speakers. Look carefully in your amplifier or receiver's instruction manual for details on how to adjust for the speaker size (sometimes called "Speaker Setup") for your system.

When using a Dolby Digital or DTS-capable receiver/processor with the subwoofer connected to the subwoofer out on your amplifier turn the "LOW-PASS FREQUENCY" control to the highest setting (200 Hz) on the back of your subwoofer. Set the subwoofer crossover setting in the speaker setup section of the amplifier setup menu to 150 Hz (or the next highest setting) and set the Satellites and Center channels to "small".

If you are NOT using the receiver's internal processor for subwoofer control then turn the "CROSSOVER FREQUENCY" control on the subwoofer to the 3 o'clock (150 Hz) setting.

SUBWOOFER AMPLIFIER PANEL

1. Power ON/Auto/OFF: This switch, when left in the "Auto" position, automatically activates the subwoofer when an audio signal is detected and shuts the subwoofer off after approximately ten (10) minutes of silence.
2. Subwoofer Level Control: Adjusts the volume of bass energy allowing you to customize overall tonal balance to your individual room acoustics and personal taste.
3. Crossover Frequency Control: This adjustment varies the point at which the subwoofer takes over the task of creating low bass frequencies from the rest of the audio signal permitting additional fine tuning of the total system. A little experimentation with this control will allow you to match the performance of the subwoofer to the rest of your speakers resulting in extraordinary, accurate, deep bass response. This control should be turned to its highest setting when the sub is connected through the Subwoofer out on your receiver.
4. Phase Control: This adjustment matches the phase - the in and out movement of speaker cones - to that of your main speakers. Adjust this control by listening to music with bass content. The setting is correct when the bass sounds the fullest.
5. High Level Input and Output: Used for direct speaker connections from the left and right front speaker outputs when a low-level subwoofer output is not available.
6. Low Level Input: Used from pre-out or Subwoofer-out.



CARING FOR THE CINEMICRO^{ONE}

All Phase Technology speakers are finished with a high degree of craftsmanship in either hand polished paint or vinyl laminates. We recommend using a lint-free rag with a small amount of glass cleaner to maintain the long-lasting beauty of the finish. Avoid products containing silicones, oils, oil derivatives, or solvents. Enclosures finished in vinyl laminates may be cleaned with a damp cloth as necessary.

MAINTAINENCE AND SERVICE

Because of Phase Technology's uncompromising quality control programs, it's unlikely that your speakers will ever need service if connected and used as outlined in this Owners' Manual. In the unlikely event that a problem does occur, please contact your Phase Technology dealer. Your dealer has the necessary factory-authorized parts and trained technicians to quickly restore your speaker to its original performance specifications.

WARRANTY

LIMITED WARRANTY

Phase Technology warrants its CineMicro loudspeakers to be free from defects in material and workmanship for a period of ten (10) years for speaker product and three (3) years for the electronic components to the original purchaser. Purchase must be made from an authorized Phase Technology dealer.

This warranty does not cover service or parts to repair damage caused by misuse, abuse, damage while in transit, alterations, unauthorized repairs, failure to follow instructions, fire, flood or any other cause beyond the reasonable control of Phase Technology. Defects in speaker cabinets or grilles must be brought to the attention of your dealer immediately after purchase. This warranty will be void if the products' serial number has been altered or removed.

To obtain warranty service, defective product must be shipped in its original carton or equivalent together with original invoice or bill of sale, insured and prepaid to your authorized Phase Technology dealer or the factory when warranty service is requested.

If you choose to return the defective product to the factory you must first call us at (888) phase-tk to obtain a Return Authorization number prior to shipping. Product repaired under this warranty will be returned to you freight collect.

SPECIFICATIONS	
Impedance	8 ohms
Sensitivity	87 dB
Frequency Response	35 Hz - 20 kHz
Tweeter	3/4" dome
Woofer	3" cone
Recommended Amp Power	100 watts per channel
Dimensions	
Satellite	4 3/8" w x 6 1/2" h x 4 7/8" d
Center	10 1/4" w x 4 3/8" h x 4 7/8" d
Subwoofer	10 3/4" w x 14 3/4" h x 15 1/8" d